WHAT IS CLAIMED IS:

1. A method of producing an electroluminescent element comprising: at least

a decomposition removal layer forming process of preparing an electrode layer, and forming, on the electrode layer or an electric charge injection transportation layer formed on the electrode layer, a decomposition removal layer which is decomposed and removed by the action of a photocatalyst in irradiation with energy and having a different contact angle with liquid from that of the electrode layer or the electric charge injection transportation layer;

a decomposition removal layer patterning process of using a photocatalyst treatment layer substrate having a photocatalyst treatment layer containing a photocatalyst formed on a substrate, and placing the photocatalyst treatment layer and the decomposition removal layer at an interval of 200 μm or less, then, conducting pattern irradiation with energy from predetermined direction so that a region to be decomposed and removed of the decomposition removal layer is irradiated with energy, to form the decomposition removal layer into a pattern;

a removing process of removing the photocatalyst treatment layer from the decomposition removal layer; and

an organic electroluminescent layer forming process of forming an organic electroluminescent layer on the electrode layer or electric charge injection transportation layer according to the pattern of the decomposition removal layer.

2. The method of producing an electroluminescent element according to Claim 1, wherein the decomposition removal layer is any of a self-assembled monolayer, Langmuir Blodgett film and layer-by-layer self-assembled film.

3. A method of producing an electroluminescent element comprising: at least

a decomposition removal layer forming process of preparing an electrode layer, and forming, on the electrode layer or an electric charge injection transportation layer formed on the electrode layer, a decomposition removal layer which is formed of a material having an electric charge shielding property and decomposed and removed by the action of a photocatalyst in irradiation with energy;

a decomposition removal layer patterning process of using a photocatalyst treatment layer substrate having a photocatalyst treatment layer containing a photocatalyst formed on a substrate, and placing the photocatalyst treatment layer and the decomposition removal layer at an interval of 200 μm or less, then, conducting pattern irradiation with energy from predetermined direction so that a region to be decomposed and removed of the decomposition removal layer is irradiated with energy, to form the decomposition removal layer into a pattern;

a removing process of removing the photocatalyst treatment layer from the decomposition removal layer; and

an organic electroluminescent layer forming process of forming an organic electroluminescent layer so as to cover the

surface of the decomposition removal layer, and the electrode layer or the electric charge injection transportation layer exposed by decomposition and removal of this decomposition removal layer.

4. A method of producing an electroluminescent element comprising:

an electrode layer patterning process of using a photocatalyst treatment layer substrate having a photocatalyst treatment layer containing a photocatalyst formed on a substrate, and placing the photocatalyst treatment layer and the electrode layer at an interval of 200 μm or less, then, conducting pattern irradiation with energy from predetermined direction, to form a pattern of a wettability difference on the surface of the electrode layer;

a removing process of removing the photocatalyst treatment layer from the electrode layer; and

an organic electroluminescent layer forming process of forming an organic electroluminescent layer on a region of the electrode layer having improved wettability with liquid.

5. A method of producing an electroluminescent element comprising: at least

an electric charge injection transportation layer forming process of forming an electric charge injection transportation layer which wettability changes so as to lower a contact angle with liquid by the action of a photocatalyst in irradiation with

energy, on an electrode layer;

an electric charge injection transportation layer patterning process of using a photocatalyst treatment layer substrate having a photocatalyst treatment layer containing a photocatalyst formed on a substrate, and placing the photocatalyst treatment layer and the electric charge injection transportation layer at an interval of 200 μm or less, then, conducting pattern irradiation with energy from predetermined direction, to form a pattern of a wettability difference in on the electric charge injection transportation layer;

a removing process of removing the photocatalyst treatment layer from the electric charge injection transportation layer; and

an organic electroluminescent layer forming process of forming an organic electroluminescent layer on a region of the electric charge injection transportation layer having improved wettability with liquid.

6. The method of producing an electroluminescent element according to Claim 5, wherein the electric charge injection transportation layer comprises at least a photocatalyst and an organopolysiloxane which is a hydrolysis condensate or co-hydrolysis condensate of one kind or two or more kinds of silicon compounds represented by a formula

$$Y_nSiX_{(4-n)}$$

(wherein, Y represents an alkyl group, fluoroalkyl group, vinyl group, amino group, phenyl group or epoxy group, and X represents

an alkoxyl group or halogen. n represents an integer of 0 to 3.).

7. The method of producing an electroluminescent element according to Claim 1, wherein the photocatalyst contained in the electric charge injection transportation layer and photocatalyst treatment layer is one kind or two or more kinds of substances selected from titanium dioxide (TiO_2), zinc oxide (ZnO), stannic oxide (SnO_2), strontium titanate ($SrTiO_3$), tungsten oxide (WO_3), bismuth oxide (Bi_2O_3) and iron oxide (Fe_2O_3).

8. The method of producing an electroluminescent element according to Claim 7, wherein the photocatalyst is titanium dioxide (TiO_2).

9. The method of producing an electroluminescent element according to Claim 1, wherein in irradiation with energy in the decomposition removal layer patterning process, the interval between the photocatalyst treatment layer and the decomposition removal layer is in a range of 0.2 μm to 10 μm.

10. The method of producing an electroluminescent element according to Claim 3, wherein in irradiation with energy in the decomposition removal layer patterning process, the interval between the photocatalyst treatment layer and the decomposition removal layer is in a range of 0.2 μm to 10 μm.

11. The method of producing an electroluminescent element according to Claim 4, wherein in irradiation with energy in the electrode layer patterning process, the interval between the photocatalyst treatment layer and the electrode layer is in a range of 0.2 μm to 10 μm.

12. The method of producing an electroluminescent element according to Claim 5, wherein in irradiation with energy in the electric charge injection transportation layer patterning process, the interval between the photocatalyst treatment layer and the electric charge injection transportation layer is in a range of 0.2 μm to 10 μm.

13. The method of producing an electroluminescent element according to Claim 1, wherein the electrode layer is formed on a base material.

14. An electroluminescent element comprising at least: a first electrode layer; a decomposition removal layer which is in the form of pattern on the first electrode layer or on an electric charge injection transportation layer formed on the first electrode layer, decomposed and removed by the action of a photocatalyst in irradiation with energy, and shows different contact angle with liquid from that of the first electrode layer or the electric charge injection transportation layer; an organic electroluminescent layer which is in the form of pattern on the electrode layer or on electric charge injection transportation

layer exposed by decomposition and removal of the decomposition removal layer and contains at least a light emitting layer; and a second electrode layer formed on the organic electroluminescent layer.

15. An electroluminescent element comprising at least: a first electrode layer; a decomposition removal layer which is in the form of pattern on the first electrode layer or an electric charge injection transportation layer formed on the first electrode layer, decomposed and removed by the action of a photocatalyst in irradiation with energy, and has an electric charge shielding property; an organic electroluminescent layer which is formed so as to coat the first electrode layer and decomposition removal layer and contains at least a light emitting layer; and a second electrode layer formed on the organic electroluminescent layer.

16. The electroluminescent element according to Claim 14, wherein the first electrode layer is formed on a base material.

17. The electroluminescent element according to Claim 15, wherein the first electrode layer is formed on a base material.